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10/849,683	08/10/2004	Carl Andrew Reis	P217CIP	7546

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LOUIS L. DACHS  
1794 PALISADES DRIVE  
PACIFIC PALISADES, CA 90272

EXAMINER

STAICOVICI, STEFAN

ART UNIT PAPER NUMBER

1732

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/849,683

Applicant(s)

REIS ET AL.

Examiner

Stefan Staicovici

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 May 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/20/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Species A in the reply filed on June 1, 2005 is acknowledged. However, in view of Applicants' response the election requirement mailed May 13, 2005 is withdrawn.

Claims 1-11 are pending in the instant application.

### ***Specification***

2. The abstract of the disclosure is objected to because of minor informalities:
  - on page 13, line 7, "(036)" should be deleted;
  - on page 13, line 12, ")2" should be replaced with --2)--;

Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities:
  - on page 6, line 24, after "then", "place" should be replaced with --placed--;
  - on page 7, line 6, it is unclear to which "Figures" Applicants are referring;
  - on page 7, line 15, "potion" should be replaced with --portion--;
  - on page 8, line 10, after "such", --that-- should be inserted.

Appropriate correction is required.

### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "32" has been used to designate both a "receiver pad" (page 6, line 25) and

"staggered blades" (page 6, line 26). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Double Patenting***

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. Claims 7-11 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-5 of copending Application No. 10/779,901. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

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F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-6 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of copending Application No. 10/779,901. Although the conflicting claims are not identical, they are not patentably distinct from each other because Claims 1-5 of copending Application No. 10/779,901 teach a process for forming a 3D woven pi shaped preform, whereas Claims 1-6 of the instant application are drawn to the genus of a fiber woven preform. It is submitted that a 3D woven pi shaped preform is a fiber woven preform.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### *Claim Rejections - 35 USC § 102*

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

10. Claims 1-5 are rejected under 35 U.S.C. 102(a) as being anticipated by McKague, Jr. *et al.* (US Patent No. 6,553,734 B1).

Regarding claim 1, McKague, Jr. *et al.* ('734) teach the claimed process for making a

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preform for use in a composite structure including, providing a fiber sheet (11) having fibers oriented in a specific direction of uniform or variable length, wherein said fiber length (15) are defined by slits (17) in a direction perpendicular to said fibers, said slits (17) being spaced apart from slits in an adjacent row (see Figure 1), cutting said sheets (11), stacking said sheets (11) in an integrated layer (21), forming said integrated layer in a sinusoidal shaped mold (41) such that stretching of the material occurs to thereby enhance deformability and shaping of the material (see col. 3, lines 1-58).

In regard to claim 2, McKague, Jr. *et al.* ('734) teach that a fiber sheet (11) having fibers oriented in a specific direction of uniform or variable length (woven sheet).

Specifically regarding claims 3-5, McKague, Jr. *et al.* ('734) teach forming slits (17) in a direction perpendicular to said fibers, shaping said integrated layer (21) in a sinusoidal shaped mold (41) such that stretching of the material occurs to thereby enhance deformability and shaping of the material (see col. 3, lines 1-58). Further, it is noted that a sinusoidal shape includes a curvature.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claims 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKague, Jr. *et al.* (US Patent No. 6,553,734 B1) in view of McKague, Jr. *et al.* (US Patent No. 6,520,706 B1).

McKague, Jr. *et al.* ('734) teach the basic claimed process as described above.

Regarding claims 6-10, McKague, Jr. *et al.* ('734) do not teach a pi-shaped preform. McKague, Jr. *et al.* ('706) teach a pi-shaped preform (11) (foot portions and leg portions) that has been shaped in a sinusoidal manner (see Figure 6A). Therefore, it would have been obvious for one of ordinary skill in the art to have formed a pi-shaped preform as taught by McKague, Jr. *et al.* ('706) using the process of McKague, Jr. *et al.* ('734) because, McKague, Jr. *et al.* ('734) specifically teaches that by forming slits the deformability of the preform improves, hence resulting in an improved process and also because a sinusoidal shaped preform provides for improved mechanical properties.

In regard to claim 11, it is submitted that the leg portions must be overlapped over the foot portions in order to obtain a common radius of curvature for said leg and foot portions as shown in Figure 6A of McKague, Jr. *et al.* ('706).

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (571) 272-1208. The examiner can normally be reached on Monday-Friday 9:30 AM to 6:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni, can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stefan Staicovici, PhD



Primary Examiner

6/22/05

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June 22, 2005